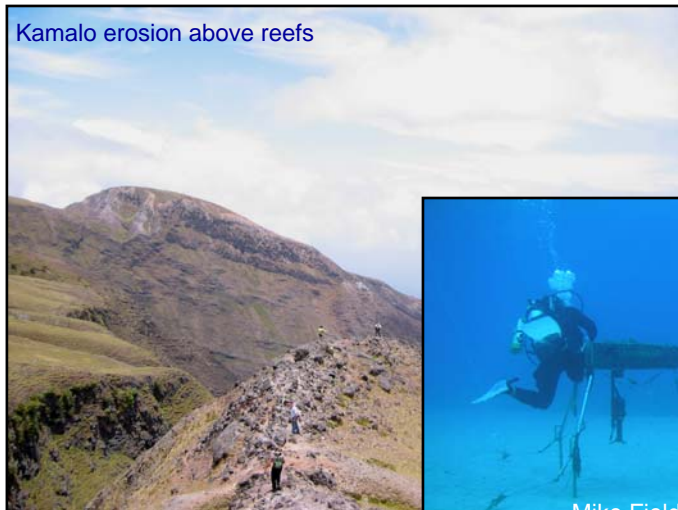


Ridge-to-Reef: Moloka'i Investigations

PIERC Project Leader: Jim Jacobi, Ph.D. (w/ Pat Chavez, Mike Field, Barry Hill and Jon Stock)



Kamalo erosion above reefs



Mike Field installs instrumentation

Objectives

- ☆ Evaluate reef and watershed ecosystems for sediment sources, transport, and causes
- ☆ Develop erosion-sedimentation model that links terrestrial and marine ecosystems with resource management options
- ☆ Assess potential impact of sedimentation and algal growth on coral physiology

Accomplishments

- ☆ Measured magnitude and residency patterns of sediments on reefs
- ☆ Acquired and evaluated > 2,500 aerial images of watersheds and reefs
- ☆ Installed stream gage with sediment sampler (Station # 16415600 at <http://hi.water.usgs.gov/>)
- ☆ Surveyed coral, algae, and bacteria in sedimented and unsedimented locations

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Significance

- ☆ Sedimentation processes are assessed relative to environmental conditions and land management within the watershed
- ☆ Active participation of resource managers including USCRTF, NPS, USFWS, NRCS, Maui County Soil & Water Conservation District, Hawaii DLNR, The Nature Conservancy, Univ. Hawaii, and community stakeholder associations